

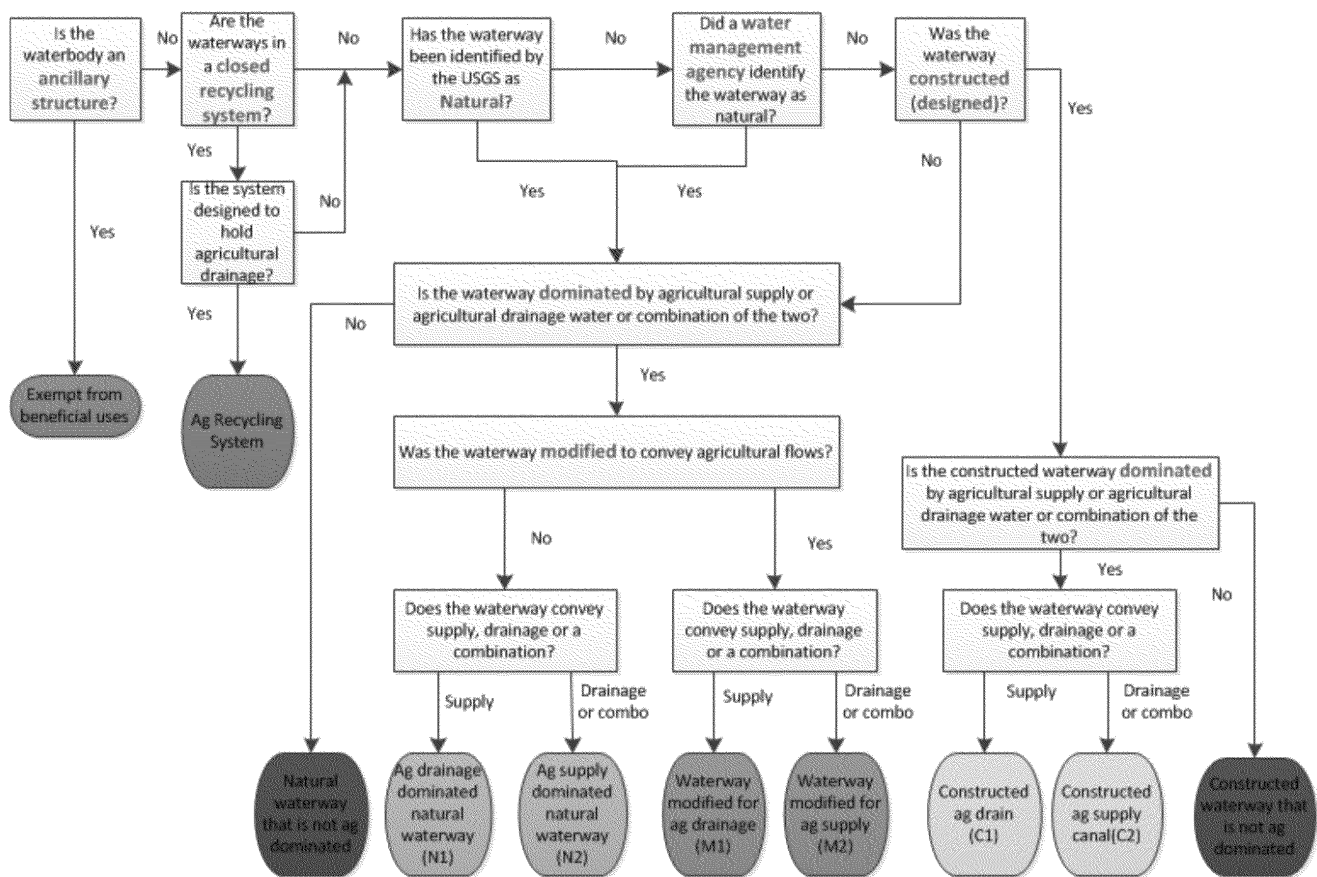
Water Body Categorization

May 3rd Stakeholder Meeting – stakeholders reviewed 5 water body categorization options presented in the Ag. Task Force Report

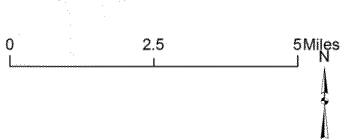
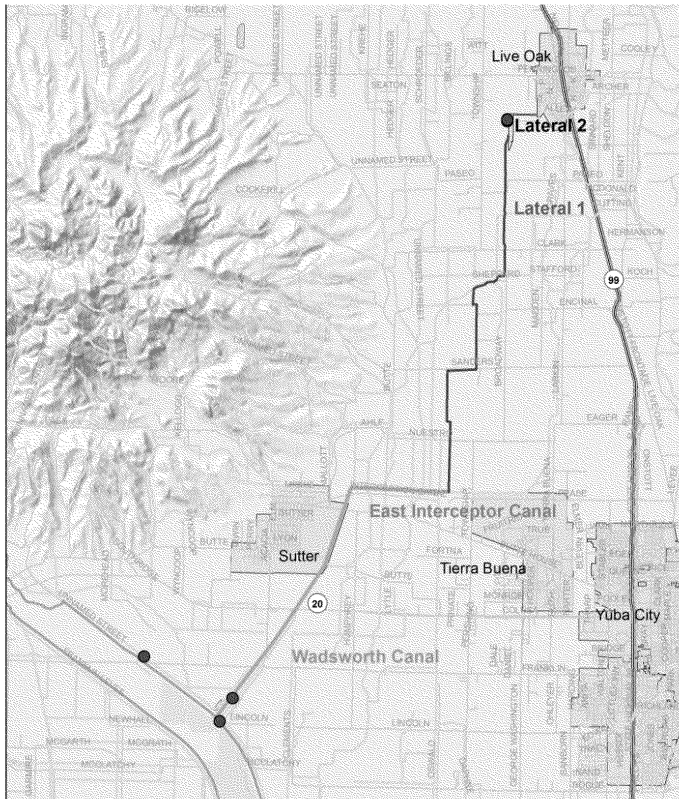
Stakeholder Feedback – wide variety of responses, ranging from the most simple to most complex categorizations

Proposed Flow Chart Option – Flowchart 1, incorporates feedback and most closely resembles the fourth option provided by the Ag. Task Force Report

Flowchart 1 – Water Body Categorization



Case Studies: Live Oak Study Area



Legend

- Monitoring Sites
- Sutter Bypass
- Lateral Drain #1
- East Interceptor Canal
- Wadsworth Canal
- Streams and other waterways
- ▨ National Wildlife Refuge

Characteristics – **Lateral 2, Lateral 1, East Interceptor Canal and Wadsworth Canal** are all constructed facilities

All were classified as a C1
(Constructed facilities designed to carry agricultural flows or drainage) water bodies for the Inland Surface Water Plan

Case Studies: Live Oak Study Area



Lateral 2



Lateral 1

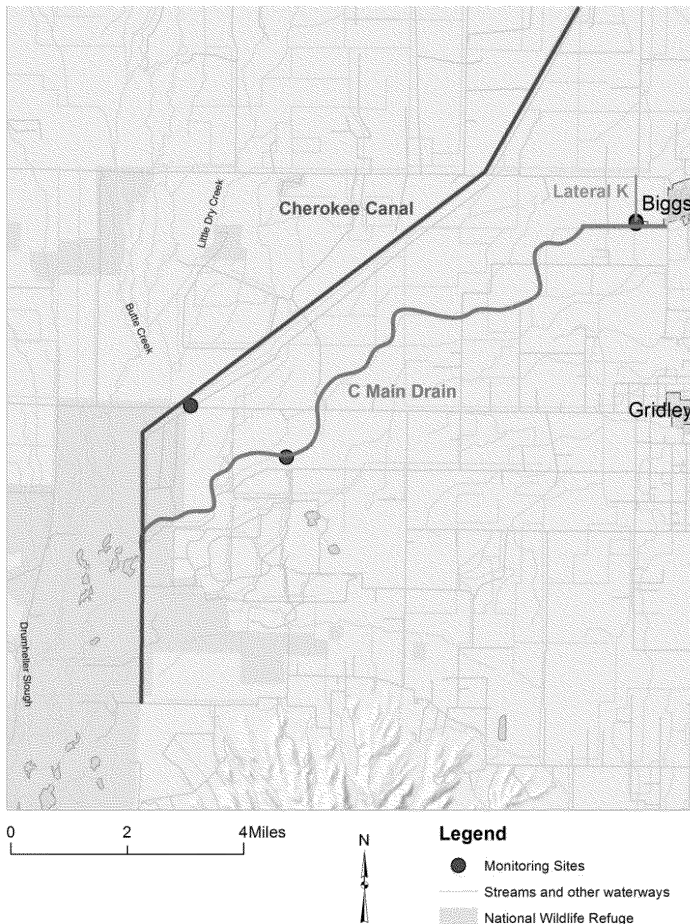


East Interceptor Canal



Wadsworth Canal

Case Studies: Biggs Study Area



Characteristics –

Lateral K is a constructed facility designed to carry Ag. drainage.

C Main Drain was a channel extension of Hamilton Slough. Carries both drainage and supply water.

Cherokee Canal is a constructed Ag. supply and drainage channel.

All were classified as a **C1**
(Constructed facilities designed to carry agricultural flows or drainage)
water bodies for the Inland Surface Water Plan

Case Studies: Biggs Study Area



Lateral K

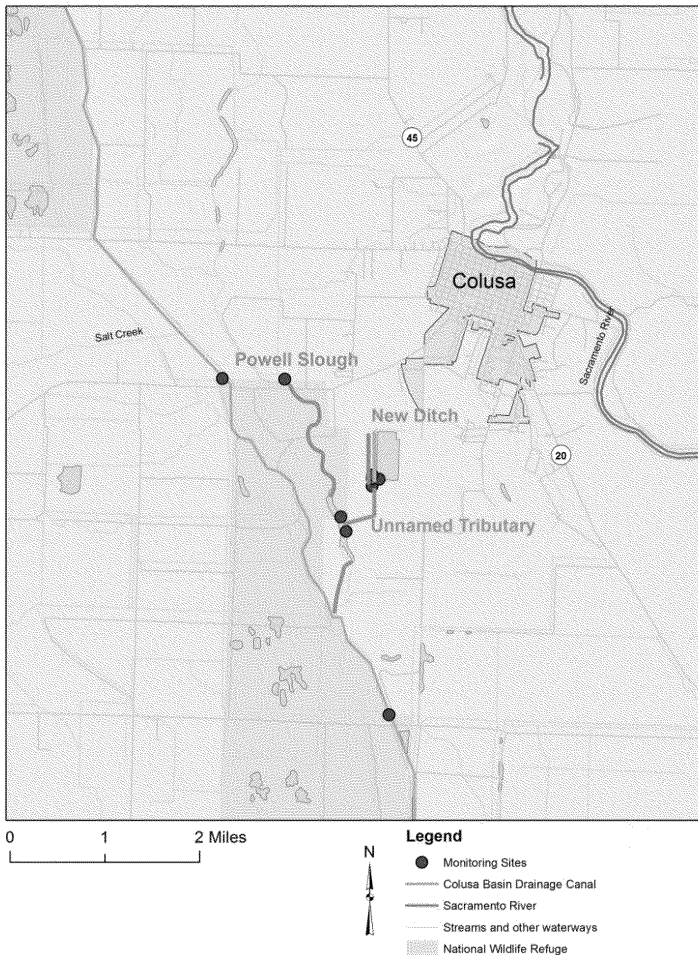


C Main Drain



Cherokee Canal

Case Studies: Colusa Study Area



Characteristics –

Unnamed Tributary is a constructed facility that carries primarily Ag. drainage.

New Ditch is a constructed (2011) channel that carries Ag. drainage.

Powell Slough is an Ag. dominated waterway with significant modifications downstream of Hwy. 20

These water bodies were not named in the Inland Surface Water Plan

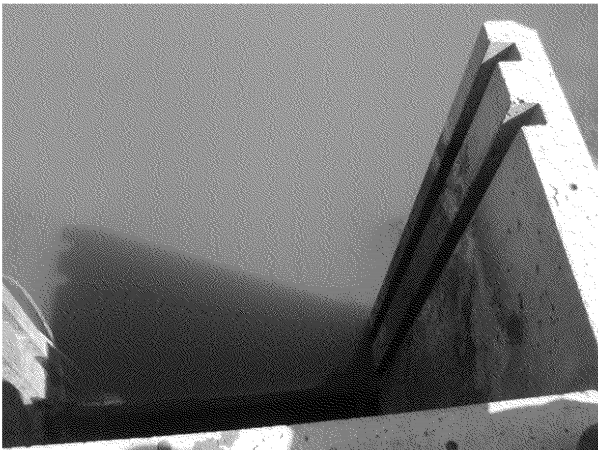
Case Studies: Colusa Study Area



Unnamed Tributary (C1)



New Ditch (C1)



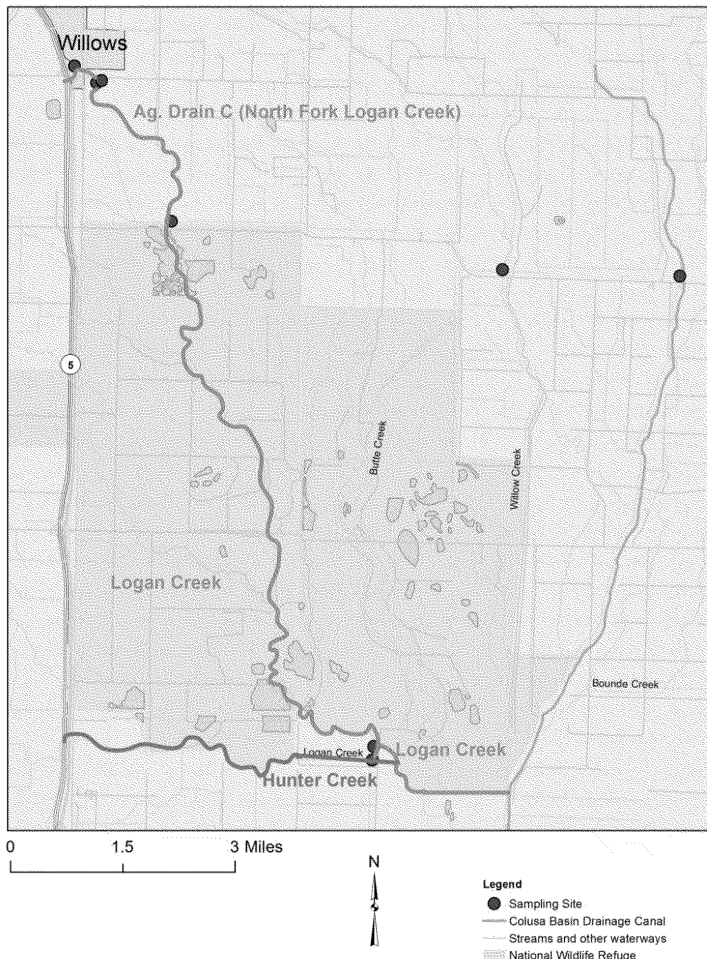
Powell Slough Weir



Powell Slough (M1 or N1)

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Case Studies: Willows Study Area



Characteristics –

Ag. Drain C – reconstructed channel of the North Fork Logan Creek. Conveys drainage water that may be recycled as supply water. Runs through the Sacramento Wildlife Refuge.

Logan Creek - Ag. Drain C meets with Logan Creek in the refuge and continues down to confluence with Hunter Creek. Heavily reconstructed after leaving the refuge until its confluence with Colusa Basin Drain.

Hunter Creek – reconstructed channel carrying drainage and water that will be recycled as supply water.

ISWP: Water bodies **outside** of refuge categorized as **C3** (Natural dry washes that have been altered and now carry Ag. supply water or return flows during time periods).

Length **within** SW refuge categorized as **B1** (Natural water bodies dominated by Ag. drainage water)

Case Studies: Willows Study Area



Ag. Drain C



Logan Creek



Hunter Creek

MUN Beneficial Use Evaluation- Policy Considerations

- Sources of Drinking Water Policy
(Resolution 88-63)
- 40 CFR 131.10(g) factors
- CDPH policy memorandum 97-005

Sources of Drinking Water Policy Exceptions (Resolution 88-63)

1. Surface and ground waters where:

- a. The total dissolved solids (TDS) exceed 3,000 mg/L (**5,000 uS/cm, electrical conductivity**) and it is **not reasonably expected** by Regional Boards **to supply a public water system, or**
- b. There is **contamination, either by natural processes or by human activity** (unrelated to the specific pollution incident), that **cannot reasonably be treated** for domestic use using either Best Management Practices or best economically achievable treatment practices, or
- c. The water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day.

2 Surface Waters Where:

- a. The water is in systems designed or modified to collect or treat municipal or industrial wastewaters, process waters, mining wastewaters, or storm water runoff, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards; or,
- b. The water is in systems designed or modified for the **primary purpose of conveying or holding agricultural drainage waters, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards.**

Basin Plan Requirement

*Where the Regional Water Board finds that one of the exceptions applies, it may remove the municipal and domestic supply beneficial use designation for the particular body of water through a formal **Basin Plan amendment** and a public hearing, followed by approval of such an amendment by the State Water Board and the Office of Administrative Law.*

40 CFR 131.10(g) factors

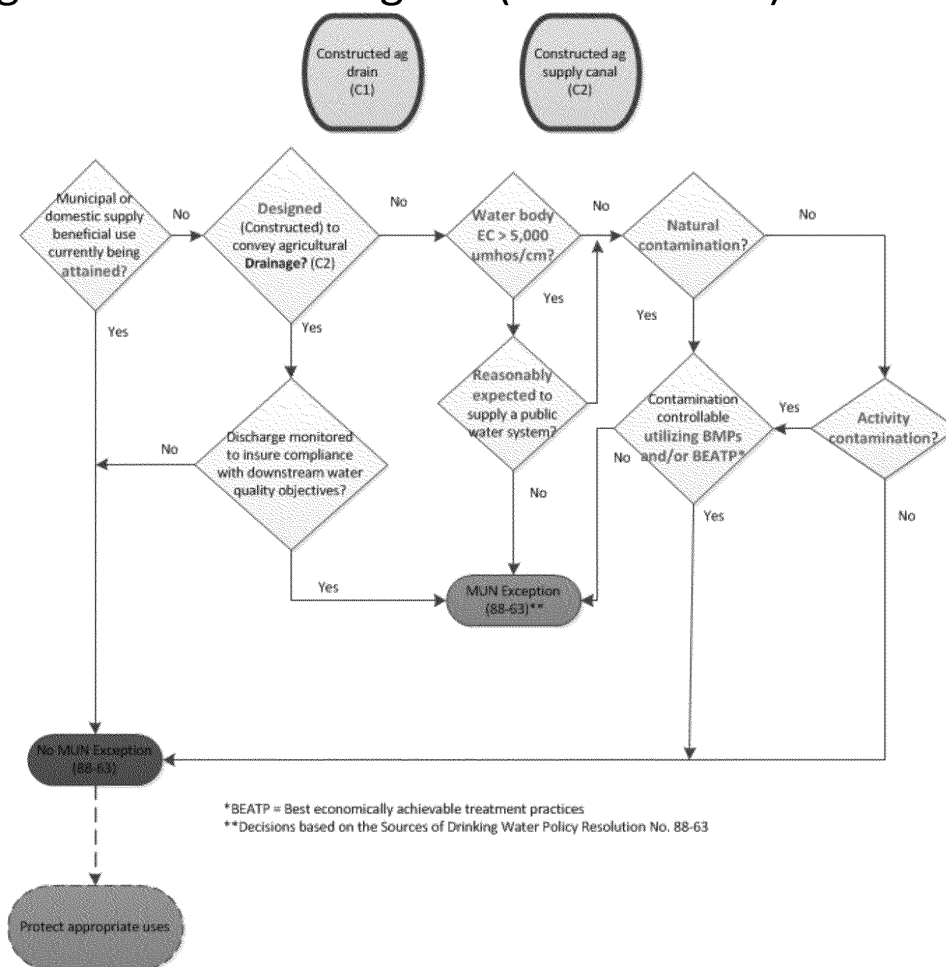
1. **Naturally occurring pollutant concentrations** prevent the attainment of the use; or
2. **Natural, ephemeral, intermittent or low flow conditions** or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or
3. **Human caused conditions or sources of pollution** prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
4. **Dams, diversions or other types of hydrologic modifications** preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or
5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
6. **Controls** more stringent than those required by sections 301(b) and 306 of the Act **would result in substantial and widespread economic and social impact.**

CDPH policy memorandum 97-005

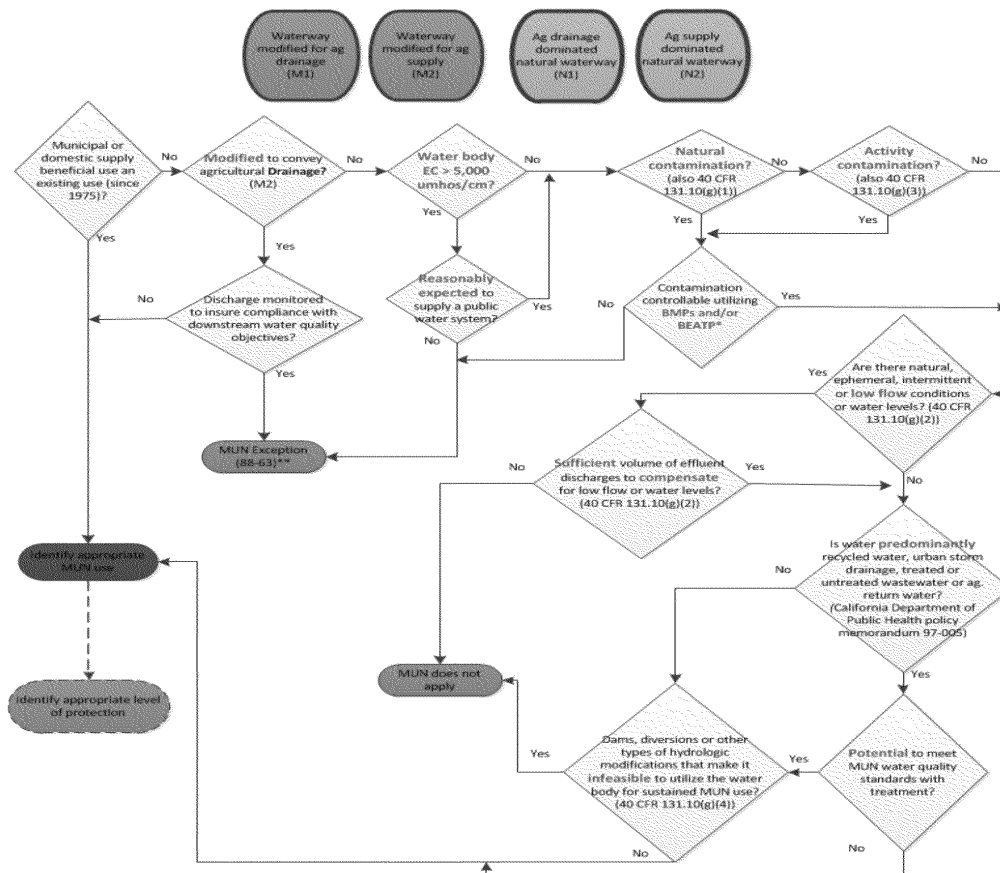
Examples of extremely impaired sources of drinking water may include:

- Extremely contaminated ground water
- Effluent dominated surface water
- Oilfield produced water
- **Water that is predominantly recycled water; urban storm drainage; treated or untreated wastewater; or agricultural return water**
- Products of toxic site cleanup programs

Flowchart 2a – (focus on Water Body Category) Ag. Dominated Designed (Constructed) Waterways



Flowchart 3a – (focus on Water Body Category) Ag. Dominated Modified and Natural Waterways

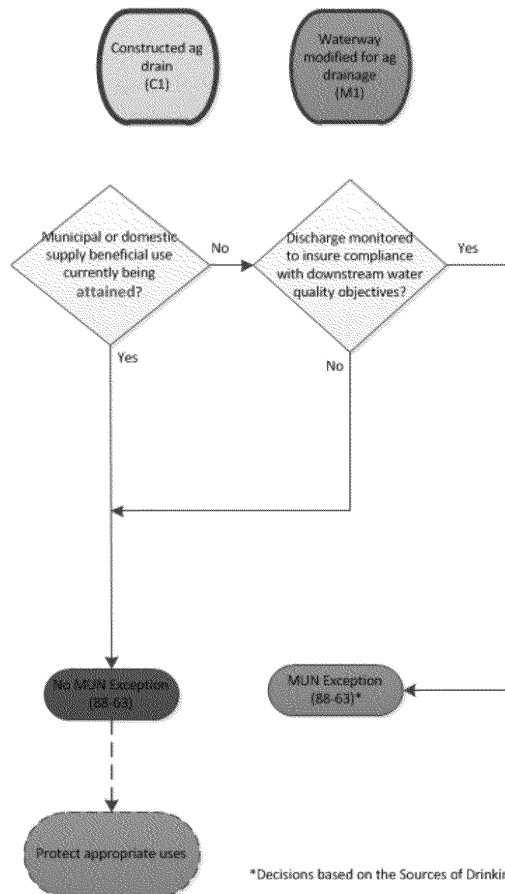


*BEATP = Best economically achievable treatment practices

**Only the modified segment is exempt for M2 water bodies who monitor discharge to insure compliance with downstream water quality objectives

Flowchart 2b – (focus on 88-63)

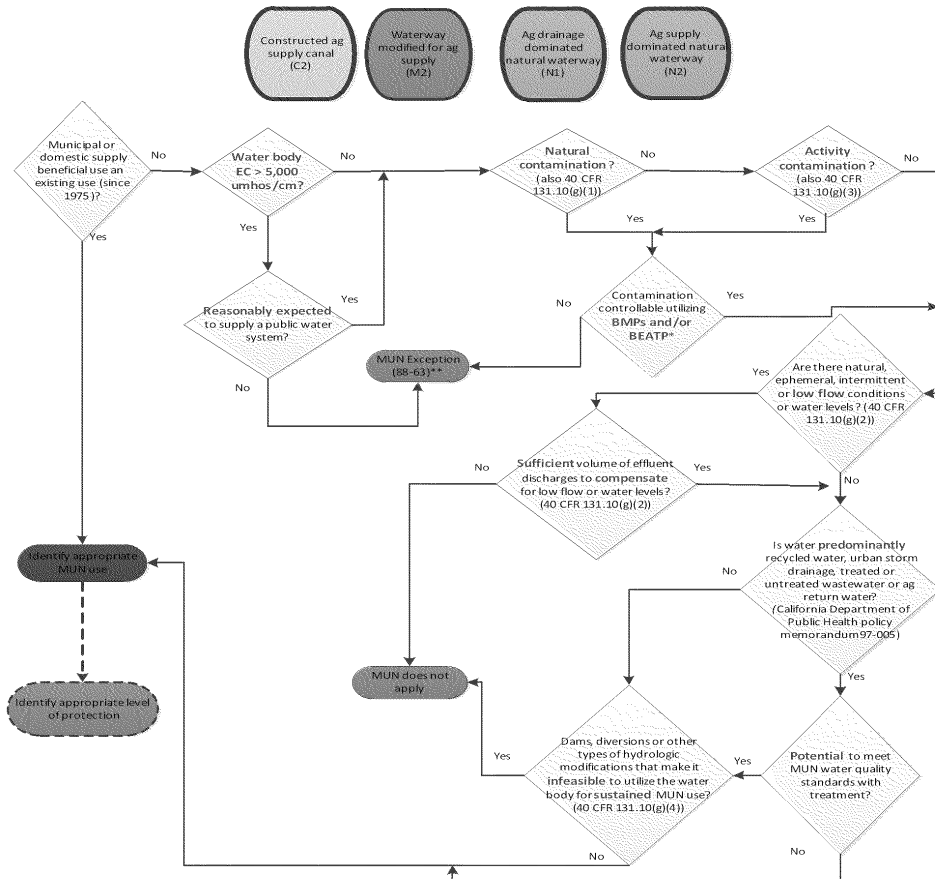
Designed (Constructed) or Modified Waterways that convey Ag. Drainage



*Decisions based on the Sources of Drinking Water Policy Resolution No. 88-63

Flowchart 3b – (focus on 88-63)

Designed (Constructed) or Modified Supply channels and Ag. dominated Natural waterways

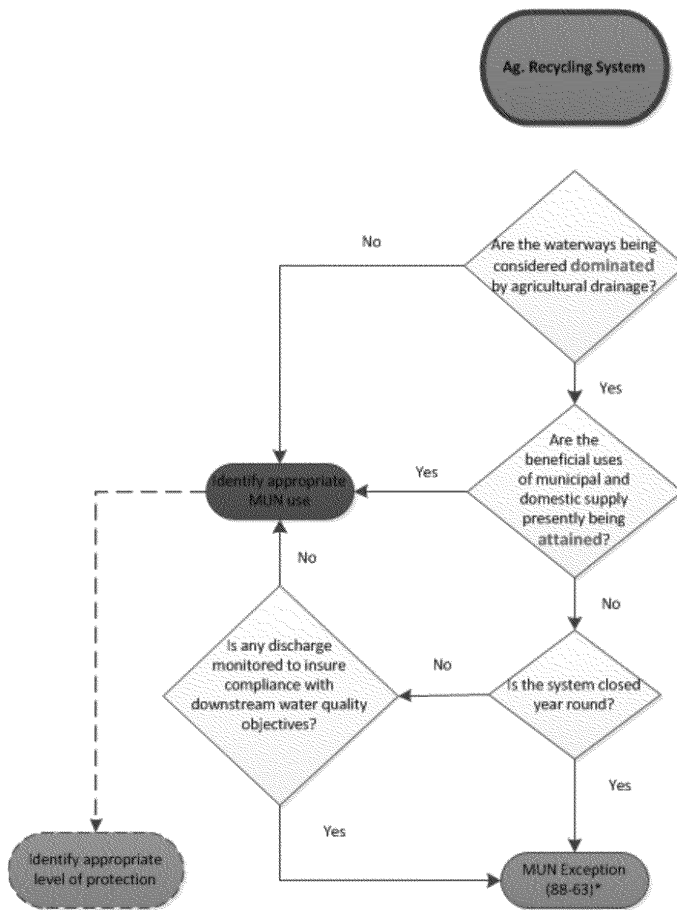


*BEATP = Best economically achievable treatment practices

** Only the modified segment is exempt for M2 water bodies who monitor discharge to insure compliance with downstream water quality objectives

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Flowchart 4 – Ag. Recycling Systems



*Decisions based on the Sources of Drinking Water Policy Resolution No. 88-63

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Lunch Break

Draft Willows MUN Evaluation Work Plan

Activity	2011		2012				2013				2014				2015			
	N	D	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Strategic Planning																		*
Compile Background																		*
Survey Conditions/Uses																		*
Initial Alternatives/CEQA Scoping																		*
Design/Conduct/Assess Monitoring																		*
Refine Alternatives									*									*
Prepare Staff Rpt/SED																		*
Public Review																		*
Peer Review																		*
Regional Board Adoption																		*
State Board Approval																		*
OAL Approval																		*

*Decision on pursuing basin plan amendment



= staff collaboration

= anticipate contract \$\$\$ need

Project Timeline

Initial Alternatives/CEQA Scoping

August 2012

- Water body Categorization Flow Charts
- Definitions
- Decision Tree/Policies

October 2012

- CEQA Scoping Session(s)

Early December 2012

- Review Feedback from CEQA Scoping Sessions
- Appropriate level of Protection/Water Quality Objectives

Project Timeline

Refine Alternatives

January 2013

- Refine Beneficial Uses/Water Quality Objectives
- Initiate Implementation Discussion
- Develop Scope of Work for Contract to address Economic Considerations

February/March 2013

- Continue Implementation
- Initiate Monitoring/Surveillance Discussion

April/May 2013

- Continue previous topics as needed

June/July 2013

- Continue previous topics as needed
- Initiate discussions on other Policy Issues (*e.g. Water Conservation Clause, Net Environmental Benefit etc.*)